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Oyvind Stromme

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EXAMINER

SMITH, CHENEA

ART UNIT

PAPER NUMBER

2421

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/696,747	Applicant(s) STROMME, OYVIND	
	Examiner CHENEA P. SMITH	Art Unit 2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This office action is in response to communications filed 1/7/2010. Claims 1-2, 12-13 and 16-17 are amended. Claim 5 is cancelled. Claims 19-20 are new. Claims 1-4 and 6-20 are pending in this action.

Response to Arguments

2. Applicant's arguments with respect to claims 1-4 and 6-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6-9, 11-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemmons (of record) in view of Bulman (US6351265, hereinafter Bulman).

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Regarding claims 1 and 12, Lemmons discloses a method for generating a stream of video images (scenes/frames of the video, see Lemmons, [0031], lines 1-2 and Figs. 6A and 6B) such as, at the reception, in each current video image, a preregistered picture (labels 610/620, see Lemmons, Figs. 6A and 6B) can be superimposed to a predetermined area of a moving object (soda can 608/618, see Lemmons, Figs. 6A and 6B), comprising:

- estimating in each current image the location, orientation and size of said predetermined area of said moving object (see Lemmons, [0081]-[0084], line 5), and

- transmitting with each current image information on the location and size of said predetermined area of said moving object (see Lemmons, [0084], lines 5-9 and '745, page 9, lines 14-29 and page 12, lines 1-3).

Lemmons does not specifically disclose providing, with a calculator, a first set of oriented views of the preregistered picture in various orientations,

- associating each oriented view of the first set of oriented views with an orientation index that identifies the physical orientation of the oriented view,

- storing, in a machine-readable medium, the first set of oriented views associated with each orientation index, or

- selecting, from the orientation indices associated with the stored oriented views, the orientation index of the oriented view having the same orientation as said predetermined area of said moving object in the current image, or

- transmitting with each current image the selected orientation index.

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In an analogous art, Bulman discloses providing, with a calculator, a first set of oriented views of a preregistered picture in various orientations (see Bulman, col 12, lines 21-25 and col 13, lines 29-33),

associating each oriented view of the first set of oriented views with an orientation index that identifies the physical orientation of the oriented view (see Bulman, Fig. 11 and col 12, lines 21-25 and col 13, lines 29-33),

storing, in a machine-readable medium, the first set of oriented views associated with each orientation index (see Bulman, col 12, lines 21-25 and col 13, lines 29-33),

selecting, from the orientation indices associated with the stored oriented views, the orientation index of the oriented view having the same orientation as a predetermined area of an object in a current image (see Bulman, col 13, lines 33-37 and Fig. 11.), and

transmitting with each current image the selected orientation index (The orientation index of Bulman's system includes orientation and positioning information along with the different orientated views of the picture, see Bulman, col 13, lines 33-37. This then, reasonably corresponds to the data file 722 of Lemmons' system, which is transmitted with each image. Therefore, Lemmons in view of Bulman reasonably teaches the limitation of transmitting with each current image the selected orientation index along with information on the location and size of said predetermined area of said moving object (see Lemmons, [0084], lines 5-9 and '745, page 9, lines 14-29 and page 12, lines 1-3, and Bulman, col 13, lines 29-33).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify Lemmons' system to include the limitations as taught by Bulman for the

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advantage of providing an improved system for allowing a combined image to be displayed with a more natural look.

Regarding claims 2 and 13, Lemmons in view of Bulman discloses downloading (see Lemmons, [0084], lines 5-9 and '745, page 9, lines 14-29 and page 12, lines 1-3) at least one second set of views of the preregistered picture (the second set of views are the updates to the hot spots/labels, see Lemmons, [0010], lines 10-18, [0013], lines 6-14 and [0040], lines 6-7, and therefore would correspond to updating the views of the preregistered picture of Bulman, see Bulman, col 12, lines 21-25 and col 13, lines 29-33), corresponding to the first set of oriented views (the second set of views are the updates to the hot spots/labels, see Lemmons, [0010], lines 10-18, [0013], lines 6-14 and [0040], lines 6-7, and therefore would correspond to updating the views of the preregistered picture of Bulman, see Bulman, col 12, lines 21-25 and col 13, lines 29-33), and for each transmitted current image:

extracting the orientation index and the size and location information (see Bulman, col 13, lines 33-37),

selecting, from the second set of views (the second set of views are the updates to the hot spots/labels, see Lemmons, [0010], lines 10-18, [0013], lines 6-14 and [0040], lines 6-7, and therefore would correspond to updating the views of the preregistered picture of Bulman, see Bulman, col 12, lines 21-25 and col 13, lines 29-33), an oriented picture in accordance with the orientation index (see Bulman, col 13, lines 33-37 and Fig. 11),

computing a scaled picture on the basis of the size information (see Lemmons, [0082]-[0084], line 5, Figs. 6A-6B and '745, Fig. 7 and page 5, lines 1-9), and

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superimposing the scaled picture in the current image at a location corresponding to the location information (see Lemmons, Figs. 6A-6B and [0082]-[0083], line 5, and '745, Fig. 7 and page 5, lines 1-9).

Regarding claim 3, Lemmons in view of Bulman discloses, at the beginning of a TV program to be transmitted, the second set of views (the second set of views are the updates to the hot spots/labels, see Lemmons, [0010], lines 10-18, [0013], lines 6-14 and [0040], lines 6-7, and therefore would correspond to updating the views of the preregistered picture of Bulman, see Bulman, col 12, lines 21-25 and col 13, lines 29-33) is downloaded in video receivers (As the labels/label information may be downloaded, and it is very well known in the art and common that a download can occur at any time, Lemmons fairly suggests that at the beginning of a TV program to be transmitted, the second set of views is downloaded in video receivers, see Lemmons, [0084], lines 5-9 and '745, page 9, lines 14-29 and page 12, lines 1-3).

Regarding claim 4, Lemmons in view of Bulman discloses the second set of views is identical to the first set of oriented views (Lemmons teaches that the labels may be altered or replaced, which thereby reasonably suggests that the second set of views can be replaced with the same or different content, see Lemmons, [0010], lines 7-8).

Regarding claim 6, Lemmons in view of Bulman discloses the second set of views contains picture frames of same orientation of the first set of oriented views (hot spots outlining the same object as those of the first set of views, see Lemmons, [0010], lines 10-18, [0013], lines 6-14 and [0040], lines 6-7 and '745, page 5, lines 4-24), with a picture content (Lemmons teaches labels/hot spots, i.e., hot labels, see Lemmons, [0010], lines 1-7).

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Regarding claim 7, Lemmons in view of Bulman discloses the content of the second set of views depends upon the geographic broadcasting zone (see Lemmons, [0013], lines 6-14 and [0040], lines 1-13).

Regarding claim 8, Lemmons in view of Bulman discloses the location and orientation information in a current image are calculated for a reference point of the object (see Lemmons, [0083]-[0084], line 5).

Regarding claim 9, Lemmons in view of Bulman discloses, in a current image, the location, orientation and size of an object are provided in a differential way with respect to a former image (see '745, page 13, line 30 – page 14, line 11).

Regarding claim 11, Lemmons in view of Bulman discloses using shape recognition tools to detect the presence of the moving object in the current image on the basis on a stored geometrical representation (see Lemmons, [0064], lines 20-32).

Regarding claim 14, Lemmons in view of Bulman discloses a second set of views contains picture frames of same orientation of the first set of views, with a picture content (the second set of views are the updates to the hot spots, see Lemmons, [0010], lines 10-18, [0013], lines 6-14 and [0040], lines 6-7 and Figs. 6A-6B).

Regarding claim 15, Lemmons in view of Bulman discloses in which the first set of oriented views contains only picture frames (because Lemmons teaches that an object may be defined with a hot spot of which may only include an outline of a specific area, it is fairly suggested that a first set of views contains only picture frames, as there is no specific ad or label visible, see '745, page 5, lines 4-24).

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Regarding claims 16 and 18, Lemmons in view of Bulman discloses superimposing, with a video receiver, the oriented view having the same orientation as said predetermined area in the current image in the current image (see Lemmons, Figs. 6A-6B and [0082]-[0083], line 5, and '745, Fig. 7 and page 5, lines 1-9 and Bulman, col 13, lines 33-37).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemmons (of record) in view of Bulman (previously cited), as applied to claim 1 above, and further in view of Wixson (of record).

Regarding claim 10, Lemmons in view of Bulman does not specifically disclose static points of an image are localizable to detect when a new object comes into a next image.

In an analogous art, Wixson discloses static points of an image are localizable to detect when a new object comes into a next image (see col 1, lines 26-32).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify the system of Lemmons in view of Bulman to include the limitations as taught by Wixson, for the advantage of providing an advertisement to the newly detected object.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemmons (of record) in view of Bulman (previously cited), as applied to claim 1 above, and further in view of Martinolich (of record).

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Regarding claim 17, Lemmons in view of Bulman does not specifically disclose superimposing, with a video production mixer, the oriented view having the same orientation as the area in the current image in the current image.

In an analogous art, Martinolich discloses superimposing, with a video production mixer, the oriented view having the same orientation as the area in the current image in the current image (see [0020], lines 1-8, [0022], lines 1-19 and Fig. 1).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify the system of Lemmons in view of Bulman to include the limitations as disclosed by Martinolich, for the advantage of using a commonly know and widely used device that allows secondary information to be added to a video signal.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemmons (of record) in view of Bulman (previously cited), as applied to claim 1 above, and further in view of Kumar et al. (US6522787, hereinafter Kumar).

Regarding claim 19, Lemmons in view of Bulman does not specifically disclose receiving sensor data associated with the orientation of the moving object.

In an analogous art, Kumar discloses receiving sensor data associated with the orientation of the moving object (See Kumar, col 4, lines 3-10).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify the system of Lemmons in view of Bulman to disclose the limitations as

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taught by Kumar for the advantage of providing an improved system for allowing a combined image to be displayed with a more natural and realistic look.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemmons (of record) in view of Bulman (previously cited), as applied to claim 1 above, and further in view of Lemmons (US20030023981, hereinafter Lemmons '981).

Regarding claim 20, Lemmons discloses a method for transmitting a stream of video images (scenes/frames of the video, see Lemmons, [0031], lines 1-2 and Figs. 6A and 6B) such that a preregistered picture (labels 610/620, see Lemmons, Figs. 6A and 6B) can be superimposed to a predetermined area of a moving object depicted in the stream (soda can 608/618, see Lemmons, Figs. 6A and 6B), the method comprising:

for each video image of the stream of video images:

determining location, orientation and size of the predetermined area of the moving object in the video image (see Lemmons, [0083]-[0084], line 5);

transmitting the video image along with the determined location and the size of the predetermined area of the moving object in the video image (see Lemmons, [0084], lines 5-9 and '745, page 9, lines 14-29 and page 12, lines 1-3).

Lemmons does not specifically disclose providing, with a calculator, a first set of oriented views of the preregistered picture in various orientations;

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in advance of transmission of the stream of video images, transmitting each oriented view of the first set of oriented views in association with an orientation index that identifies a physical orientation of the oriented view of the preregistered picture;

selecting, from the orientation indices associated with the first set of oriented views, an orientation index corresponding to an orientation of the predetermined area of the moving object in the video image, or

transmitting with each current image the selected orientation index.

In an analogous art, Bulman discloses providing, with a calculator, a first set of oriented views of the preregistered picture in various orientations (see Bulman, col 12, lines 21-25 and col 13, lines 29-33);

selecting, from the orientation indices associated with the stored oriented views, an orientation index of the oriented view having the same orientation as a predetermined area of an object in a current image (see Bulman, col 13, lines 33-37 and Fig. 11.), and

transmitting with each current image the selected orientation index (The orientation index of Bulman's system includes orientation and positioning information along with the different orientated views of the picture, see Bulman, col 13, lines 33-37. This then, reasonably corresponds to the data file 722 of Lemmons' system, which is transmitted with each image. Therefore, Lemmons in view of Bulman reasonably teaches the limitation of transmitting with each current image the selected orientation index along with information on the location and size of said predetermined area of said moving object (see Lemmons, [0084], lines 5-9 and '745, page 9, lines 14-29 and page 12, lines 1-3, and Bulman, col 13, lines 29-33).

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It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify Lemmons' system to include the limitations as taught by Bulman for the advantage of providing an improved system for allowing a combined image to be displayed with a more natural look.

Lemmons in view of Bulman also discloses associating each oriented view of the first set of oriented views (i.e., enhancement information) with an orientation index that identifies the physical orientation of the oriented view (see Bulman, Fig. 11 and col 12, lines 21-25 and col 13, lines 29-33), and storing this enhancement information, but does not specifically disclose transmitting the enhancement information in advance of transmission of the stream of video images.

In an analogous art, Lemmons '981 discloses transmitting enhancement information in advance of transmission of a stream of video images (see [0029]-[0030], lines 1-4).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify the system of Lemmons in view of Bulman to include the limitations as taught by Lemmons '981 for the advantage of providing an improved system for delivering enhancement data while conserving bandwidth.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHENEA P. SMITH whose telephone number is (571)272-9524. The examiner can normally be reached on Monday through Friday, 7:30 am - 5:00 pm, EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John W. Miller/
Supervisory Patent Examiner, Art Unit 2421

/Chenea P. Smith/
Examiner, Art Unit 2421